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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,194	03/29/2004	Kiyoshi Minoura	58,175-DIV (45672)	5841
7590 08/28/2006				
EDWARDS & ANGELL, LLP P.O. Box 55874 Boston, MA 02205			EXAMINER KIM, RICHARD H	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,194

Applicant(s)

MINOURA, KIYOSHI

Examiner

Richard H. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-55 is/are pending in the application.
- 4a) Of the above claim(s) 14,15,17-42,47,48,53 and 54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-13,16,43-46,49-52 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 14,15,17-42, 47, 48, 53 and 54 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/7/06.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 9, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsunoda et al. (US 4,952,031)

Referring to claims 9 and 16, Tsunoda et al. discloses a device comprising a plurality of pixel electrodes (12c) defining a plurality of pixels that are arranged in a matrix pattern; optical switching elements (col. 7, line 33) electrically connected to the plurality of pixel electrodes, respectively; scanning signal light emitting elements (9) for emitting dotted light, as scanning signals, to the optical switching elements; and a louver (8) provided between the optical switching element and the scanning signal light emitting element, the louver comprising a plurality of cells immediately on each scanning signal light emitting element (col. 7, lines 24-40).

Referring to claim 13, Tsunoda et al. disclose at least one counter electrode (12d) opposing the plurality of pixel electrodes; and a liquid crystal layer (col. 8, lines 4-5) provided between the plurality of pixel electrodes and the at least one counter electrode.

3. Claims 11, 12, 50-52 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. in view of Iijima (US 6,870,586 B2).

Referring to claims 11, 12, 50, 51 and 55, Tsunoda et al. discloses the device previously recited, but fails to disclose the device employing a first polarizing element provided between the optical switching element and the scanning signal light emitting element for modulating light emitted from the scanning signal light emitting element into a predetermined state; and a second polarizing element provided between the first polarizing element and the optical switching element and arranged so as to selectively transmit light that is in the predetermined polarized state.

Iijima discloses a device employ employing a first polarizing element (22) is provided between the optical switching element and a backlight for modulating light emitted from the backlight into a predetermined state; and a second polarizing element (21) provided between the first polarizing element and the optical switching element and arranged so as to selectively transmit light that is in the predetermined polarized state.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a first polarizing element is provided between the optical switching element and the scanning signal light emitting element for modulating light emitted from the scanning signal light emitting element into a predetermined state; and a second

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polarizing element provided between the first polarizing element and the optical switching element and arranged so as to selectively transmit light that is in the predetermined polarized state since one would be motivated to provide a liquid crystal display device which has excellent visibility and which realizes a bright display by increasing the amount of light reflected in a direction of the line of sight of a user (col. 2, lines 60-64).

Referring to claim 52, Tsunoda et al. disclose at least one counter electrode (12d) opposing the plurality of pixel electrodes; and a liquid crystal layer (col. 8, lines 4-5) provided between the plurality of pixel electrodes and the at least one counter electrode.

4. Claims 10, 43, 46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. in view of Lyu (US 5,754,261).

Referring to claims 10 and 43, Tsunoda et al. discloses the device previously recited. However, the reference fails to disclose a backlight provided on a side away from the optical switching element with respect to the scanning signal light emitting element; and a light blocking layer provided on a side of the scanning signal light emitting element that is closer to the backlight.

Lyu discloses a device comprising a backlight (85) provided on a side away from the optical switching element with respect to the scanning signal light emitting element; and a light blocking layer (60) provided on a side of the scanning signal light emitting element that is closer to the backlight.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a backlight provided on a side away from the optical switching

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element with respect to the scanning signal light emitting element; and a light blocking layer provided on a side of the scanning signal light emitting element that is closer to the backlight since one would be motivated to since one would be motivated to reduce stress on the substrate, thereby improving yield (col. 3, lines 31-35).

Referring to claim 46, Tsunoda et al. disclose at least one counter electrode (12d) opposing the plurality of pixel electrodes; and a liquid crystal layer (col. 8, lines 4-5) provided between the plurality of pixel electrodes and the at least one counter electrode.

Referring to claim 49, Tsunoda et al. discloses the device wherein the scanning signal light-emitting element (9) is formed on a dot-like shape.

5. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. and Lyu in view of Iijima.

Tsunoda et al. and Lyu disclose the device previously recited, but fails to disclose the device wherein the light emitted from the scanning signal light emitting element is modulated in a predetermined polarized state, and substantially only light that is predetermined polarized state is incident on the optical switching element.

Iijima discloses a device employ employing a first polarizing element (22) provided between the optical switching element and a backlight for modulating light emitted from the backlight into a predetermined state; and a second polarizing element (21) provided between the first polarizing element and the optical switching element and arranged so as to selectively transmit light that is in the predetermined polarized state.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a first polarizing element is provided between the optical switching element and the scanning signal light emitting element for modulating light emitted from the scanning signal light emitting element into a predetermined state; and a second polarizing element provided between the first polarizing element and the optical switching element and arranged so as to selectively transmit light that is in the predetermined polarized state since one would be motivated to provide a liquid crystal display device which has excellent visibility and which realizes a bright display by increasing the amount of light reflected in a direction of the line of sight of a user (col. 2, lines 60-64).

Response to Arguments

6. Applicant's arguments filed 2/15/06 have been fully considered but they are not persuasive.

7. In response to Applicant's argument that Tsunoda et al. does not disclose "said louver comprising a plurality of cells immediately on each scanning signal light emitting element" Examiner submits that in column 7, lines 24-40, it states that "the louver extends along the optical path connecting the light emitting device to the optical path connecting the light emitting device to the cooperating activated switch". Therefore, the louver comprises a cell that is between each switch and the light emitting element. Even though Figure 1 does not illustrate each scanning signal light emitting element, the description of column 7, lines 24-40 indicates

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that the louver comprises a plurality of cells immediately on each scanning signal light emitting element.

8. In response to Applicant's argument that Iijima fails to disclose any optical switching element, Examiner submits that Iijima was only incorporated to provide for the missing limitation in the primary reference. Iijima teaches that employing the polarizer is well known and obvious to be used in an LCD device according the motivation stated above. Polarizers are extremely well known in the art in order to improve viewing quality. Therefore, employing a polarizer in an LCD with simply a different feature would still be obvious.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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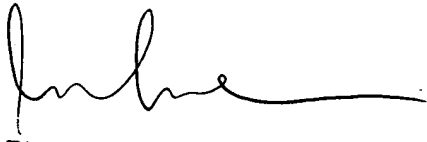
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RHK

Richard H Kim
Examiner
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DUNG T. NGUYEN
PRIMARY EXAMINER